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Fairness Enactment as Response to Higher Level Unfairness: The Roles of Self- Construal and Spatial Distance

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ABSTRACT

In contrast to the abundance of evidence on employee reactions to manager unfairness, we know very little about factors that predict whether managers will act fairly or not. This paper explores the effect of procedural unfairness that emanates from higher level managers on procedural fairness enactment at lower levels in the organization. We argue that lower level managers can enact both *more and less* fair procedures in response to higher level unfairness and that this depends on the extent to which lower level managers define the self in terms of their relation with their higher level manager (i.e., relational-interdependent self-construal). We study both the moderating role of self-construal and how it is embedded in the physical environment of the organization. We pay particular attention to how spatial distance between higher and lower management affects self-construal at lower levels and – because of this relationship – the enactment of fair procedures within the organization. We conduct four studies (in two of which we study spatial distance as an antecedent for self-construal) and show that relatively high levels of relational-interdependent self-construal lead to assimilation in terms of procedural fairness enactment, whereas relatively low levels lead to contrast.

Keywords: Procedural fairness enactment; Relational-Interdependent Self-Construal; Spatial Distance; Assimilation vs. Contrast; Higher level management influences

**FAIRNESS ENACTMENT AS RESPONSE TO HIGHER LEVEL UNFAIRNESS:
THE ROLES OF SELF-CONSTRUAL AND SPATIAL DISTANCE**

If one conclusion is warranted after four decades of research, it would be that procedural fairness *matters* (Colquitt et al., 2013). Employees care strongly about fairly enacted procedures (Rupp, 2011) and, in particular, the experience of unfair procedures generally motivates strong negative responses (Brockner, Tyler, & Cooper-Schneider, 1992; De Cremer, 2004). Indeed, procedural fairness has been shown to have substantial effects on virtually all important organizational outcomes (Cropanzano & Stein, 2009). Given these pervasive effects, it is surprising that research addressing factors that influence whether managers enact fair procedures (or not) is still in its infancy (Scott, Colquitt, & Paddock, 2009). For instance, there is some evidence that aspects of the manager-employee relationship and characteristics of individual managers predict whether procedures will be enacted fairly (Scott, Colquitt, & Zapata, 2007; Seppälä, Lipponen, Pirttilä-Backman, & Lipsanen, 2012). However, research has yet to go beyond the manager-employee dyad and take the broader context of the organization into account. In the present paper, we focus on procedural fairness enactment of lower level managers who interact with employees and consider whether the fairness of procedures enacted at higher levels influences fairness enactment down the line.

We will argue that fairness enactment at lower levels may be influenced by higher level fairness in two different ways. First, lower level managers may *assimilate* higher level behavior, thus enacting procedures in an unfair manner after experiencing unfairness themselves. Alternatively, lower level managers may *contrast* behavior at

higher levels, thus enacting fairer procedures after experiencing unfairness themselves¹. We propose that the effect of higher level fairness (i.e., towards assimilation or contrast) ultimately depends on relational-interdependent self-construal; high levels of relational-interdependent self-construal are associated with assimilation in fairness enactment and low levels with contrast.

It is important to note that relational-interdependent self-construal is not an isolated variable but is embedded in the physical and social reality of the organization. In this paper, we focus on the spatial distance between lower and higher level managers. We argue that large spatial distances are likely associated with low relational-interdependent self-construal and small spatial distances with high relational-interdependent self-construal (Kagitcibasi, 2005). Because of this association, we suggest that close lower level managers are more likely to display an assimilatory stance, whereas distant lower level managers are more likely to contrast higher level unfairness. Figure 1 visually represents our proposed model.

Insert Figure 1 about here

In taking this approach, we aim to make at least three relevant contributions. First, we consider procedural fairness enactment as a phenomenon that is embedded in the hierarchical context of organizations. We thus argue that the enactment of fair procedures by managers who interact with employees does not simply result from direct interactions with subordinates, but is influenced by a manager's own personal fairness experiences.

¹ We focus on the effects of *un*fairness in particular, since previous research shows that people are more likely to respond strongly to unfair procedures (Brockner et al., 1992; De Cremer, 2004), in line with a general negativity bias that people display (Rozin & Royzman, 2001).

Second, we show that higher level management behavior does not necessarily lead to assimilation (i.e., more *similar* behavior) down the line as is often suggested (e.g., Ambrose, Schminke, & Mayer, 2013; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009), but can actually also have the opposite effect (i.e., more *dissimilar* behavior, contrast). By analyzing this process in terms of self-construal, we present a theoretically meaningful account of why and when managers assume an assimilative or contrasting stance. Thirdly, we shed more light on how an objective, physical, variable, (i.e., spatial distance) can inform psychological and organizational processes through its effect on managers' self-definitions. In doing so, our research is - as far as we know - the first attempt to link self-construal and its role in various psychological processes with the physical organizational reality. This approach also has clear practical relevance as it uncovers an important coordination issue in organizations, in which spatial distances between management levels are likely to grow over the years to come (Avolio, Sosik, Kahai, & Baker, 2014).

THEORETICAL BACKGROUND

Procedural Fairness Enactment

Procedural fairness enactment can be defined as the extent to which organizational actors uphold certain procedural rules (e.g., voice, accuracy, timeliness) in allocating important outcomes (Thibaut & Walker, 1975). It has been shown to be especially important for organization members to cope with outcomes that are unfavorable to them (Brockner & Wiesenfeld, 1996). To date, however, antecedents of procedural fairness enactment have received relatively little empirical attention (Scott et al., 2009; Seppälä et al., 2012). Apart from considering characteristics of the enacting

managers in terms of their moral identity (Brebels, De Cremer, Van Dijke, & Van Hiel, 2011), the limited number of studies published on this topic focus virtually exclusively on the relationship between subordinates and the enacting manager. Studies show that procedural fairness enactment is stimulated by subordinate charisma (Scott et al., 2007), subordinate support (Cornelis, Van Hiel, & De Cremer, 2006), and subordinate trust in the enacting manager (Seppälä et al., 2012). High status and low power have also been shown to stimulate procedural fairness enactment (Blader & Chen, 2012). Yet, none of these studies have taken into account the influence that those higher up in the organizational hierarchy have on the enacting manager; a source of influence that is highly likely to be relevant (Kim & Mauborgne, 1993).

Given the relative lack of studies within the fairness literature on this point, the emerging literature on the trickle-down effects of leadership behaviors may be informative here. For instance, several studies show that ethical leadership behaviors at the top of the organization influence ethical leadership behaviors further down, even for managers that are unlikely to have frequent contact with top management (Mayer et al. 2009; Ruiz, Ruiz & Martínez, 2011). This is because top management behavior is generally considered an important source of information that managers lower down the hierarchy pay special attention to (Peterson, Smith, Martorana, & Owens, 2003). This phenomenon can be generalized to other forms of leadership behaviors, such as abusive supervision (Zellars, Tepper & Duffy, 2002) and interactional justice enactment (Ambrose et al., 2013). The enactment of fair procedures is a central part of ethical leadership (Brown & Treviño, 2006) as the enactment of unfair procedures is characteristic for abusive supervision (Tepper, 2007). It is thus likely that procedural

fairness enactment at the top trickles down in a similar way as ethical leadership behavior and abusive supervision more generally do (Masterson, 2001).

However, most, if not all, studies on such trickle-down effects implicitly assume that top-level behavior is likely to be assimilated at lower levels (e.g., Aryee, Chen, Sun, & Yaw, 2007; Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012; Mayer et al., 2009). In this paper, however, we suggest that contrasting behavior is also possible, depending on the level of relational-interdependent self-construal.

Self-construal and fairness enactment

Scholars studying the self and personality have long realized that the self can be construed at various levels along the individualism-collectivism continuum (Ashfort & Mael, 1989). Relational-interdependent self-construal can be located roughly in the middle of this continuum, and is defined as a tendency to define the self in terms of relations with specific others (e.g., ‘father’ or ‘friend’; Cross, Gore, & Morris, 2003). Several scholars have noted that the supervisor-subordinate relation can have such self-definitional consequences (DeRue & Ashford, 2010; Kark & Shamir, 2002) such that subordinates may define themselves more or less interdependently with their supervisors. Yet, the organizational literature still has to explore the consequences of higher or lower relational-interdependent self-construal for many organizational behaviors. Here we specifically focus on procedural fairness enactment and argue that assimilation of higher level unfairness is particularly likely when relational-interdependent self-construal is high.

We argue that high relational-interdependent self-construal with another person makes it more likely that we take this other’s behavior as a model for our own behavior.

By definition, when relational-interdependent self-construal is high, people perceive the other as being part of the self; when it is low this is not the case (Griffin & Bartholomew, 1994). It is well known that people often deduce standards for behavior from observing others (MacCoun, 2012). High relational-interdependent self-construal makes it more likely that people actually act according to those standards (Cialdini, Wosinska, Baret, Butner, & Gornik-Durose, 1999). For instance, studies show that observing immoral or undesirable behavior may lead people to behave less ethically or desirably themselves, but mainly when they feel connected to this other person in some way (Gino & Galinsky, 2012).

In contrast, observing negative behavior from another person who is seen as relatively dissimilar to the self has been suggested to lead to contrast (more positive) behavior, as people may be motivated to distance themselves from that other person (Monin, 2007). Put differently, observing a relatively distant other behaving in an undesirable fashion may be taken as a minimal standard, that is: an example of how not to behave (Berthold, Mummendey, Kessler, Luecke, & Schubert, 2012). In this way, relational-interdependent self-construal essentially regulates whether another person is seen as relevant or irrelevant for the understanding of the self (Cross, Bacon & Mottis, 2000), and therefore the direction of influence of the observed behavior (towards assimilation or contrast). In our context, we argue that that high relational-interdependent self-construal leads lower level managers to enact relatively unfair procedures themselves in response to higher level unfairness. In contrast, low relational-interdependent self-construal should be associated with a tendency to enact fairer procedures under the same circumstances.

Relational-interdependent self-construal is, at least, partly a function of the social and physical environment of the organization (Kay, Wheeler, Bargh, & Ross, 2004; Kimmelmeier & Oyserman, 2001). In this paper, we focus on an important objective antecedent of relational-interdependent self-construal: spatial distance between higher and lower level management.

Spatial distance and relational-interdependent self-construal

In focusing on spatial distance, we take our cue from several literatures especially, the job design literature (Szilagyi & Holland, 1980). Within this literature there is a widely shared understanding of how objective, physical variables (including spatial distance) can modulate psychological processes. For instance, in a recent review of the job design literature, Grant (2007) points out that spatial distance is associated with affective commitment, identification, liking and perspective taking, and subsequent behaviors in organizational contexts. This is in line with findings from the literature on cross-cultural psychology in which spatial distance has been shown to affect self-construal (Kagitcibasi, 1996); larger distances from family have been shown to be generally associated with weaker interdependent self-construals (Kagitcibasi, 2005). In line with this, Williams and Bargh (2008) show that people primed with the concept of spatial distance reported lower feelings of connectedness with family members and hometowns, relative to people primed with spatial closeness.

More fundamentally, spatial distance is a basic element of our reality, an understanding of which is acquired very early in life (Williams & Bargh, 2008). In fact, our understanding of other forms of distance (social, temporal, psychological, etc.) is based on our understanding of physical distance (Landau, Meier & Keefer, 2010). That is,

things are experienced to be “far away” in time as well as in space, important others feel “close”, and so on (Saj, Fuhrman, Vuilleumier, & Boroditsky, 2014). O’Connor, Meade, Carter, Rossiter, and Hester (2014) offer another illustration of the fundamentality of spatial distance and show that even sensitivity to rewards and punishment is reduced over spatial distance. Thus, even the influence of the most fundamental cues for behavior is less pronounced over distances.

These diverse findings with respect to the fundamentality of spatial distance for our understanding of (social) reality support the contention that spatial distance is associated with relational-interdependent self-construal in such a way that small distances are associated with relatively higher levels of relational-interdependent self-construal and larger distances with relatively lower levels (Kagitcibasi, 2005). Given the role of spatial distance as an objective antecedent of relational-interdependent self-construal, we predict that larger spatial distances should be associated with an increased likelihood that higher level unfairness will be contrasted at lower levels, whereas smaller spatial distances are associated with assimilation (see Figure 1).

Overview of predictions and studies

In sum, we argue that the way in which lower level managers experience fairness (i.e., of the procedures enacted by higher level management) is important in shaping how they themselves enact decision-making procedures. We argue that this influence can take one of two forms: assimilatory (i.e., more similar behavior down the line) or contrasting (i.e., more dissimilar behavior down the line). Whether middle managers display a contrasting or assimilatory stance is contingent on their level of relational-interdependent self-definition such that low levels are associated with contrast, whereas high levels are

associated with assimilation. Specifically, we propose the following hypotheses:

Lower levels of procedural fairness experience are associated with lower levels of procedural fairness enactment when relational-interdependent self-construal is relatively high (Hypothesis 1).

Lower levels of procedural fairness experience are associated with higher levels of procedural fairness enactment when relational-interdependent self-construal is relatively low (Hypothesis 2).

Furthermore, we argue that relational-interdependent self-construal is, at least, partly a function of the physical environment of the organization, especially of the spatial distance between higher and lower level management. Low spatial distance is likely to be associated with high relational-interdependent self-construal, whereas high spatial distance is likely to be associated with low relational-interdependent self-construal. Thus:

Lower levels of procedural fairness experience are associated with lower levels of procedural fairness enactment when spatial distance between higher and lower level management is relatively small. This effect is mediated by relational-interdependent self-construal (Hypothesis 3).

Lower levels of procedural fairness experience are associated with higher levels of procedural fairness enactment when spatial distance between higher and lower level management is relatively large. This effect is mediated by relational-interdependent self-construal (Hypothesis 4).

We test these hypotheses using several approaches. We first conduct an exploratory Pilot Study in which we test the effects of spatial distance on relational-interdependent self-construal in a laboratory setting. Then, in Study 1, a multisource field

study, and Study 2, a laboratory experiment, we investigate the effect of spatial distance, modeled as an antecedent of relational-interdependent self-construal, on the relationship between fairness experiences and fairness enactment. In our final two studies, Study 3 and 4, we directly test the moderating role of relational-interdependent self-construal. These studies are both cross-sectional field studies in which we measure procedural fairness experience as well as procedural fairness enactment and relational-interdependent self-construal. In Study 4, we also measure a number of variables in addition to spatial distance, i.e., perceived autonomy, perceived similarity, and psychological closeness, to address possible alternative explanations for our findings in the first three studies.

PILOT STUDY

Method

Participants and design. Sixty undergraduate business students, $M_{\text{age}} = 20.97$, $SD = 1.42$, 27 females (45 %), at a mid-sized European university participated for partial fulfillment of course credit. They were randomly assigned to a high vs. low spatial distance condition.

Procedure. Participants were told that they were connected through a network to another participant's computer, located either close by (in the same lab) or far away (about 500 meters away at the other end of the campus) and that they had to work together in a team. The other participant was the team leader, whereas the participant was a subordinate. In reality, all interactions were pre-programmed. After the participants had interacted for some time with this other participant, we collected our manipulation check and dependent measure.

Dependent measure. We measured self-construal with Cross, Bacon, and Morris' (2000) relational-interdependent self-construal scale. As this scale generally targets (one's) close relationships in general as target, we slightly adapted the items so that the other participant was the target (e.g., "My relationship with the leader is an important part of my self-image" and "My relationship with the leader has very little to do with how I feel about myself" [reversed]; 0 = *strongly disagree*; 6 = *strongly agree*; $\alpha=.61$ – see Linardatos & Lydon, 2011, for a comparable procedure).

Results and conclusion. A one-way ANOVA showed an effect of distance on self-construal in the expected direction, $F(1, 58) = 4.15, p = .046, \eta^2 = .07$. In the close condition, participants, on average, defined themselves more strongly in terms of their relationship with the leader, $M = 4.41, SD = 0.74$, than those in the distant condition, $M = 4.03, SD = 0.68$.

STUDY 1

In this study, we tested whether spatial distance between lower and higher level managers is associated to contrast or assimilation in procedural fairness enactment in response to higher level fairness enactment. We employed a multisource survey design in which colleagues rated the procedural fairness enactment of lower level managers. These lower level managers rated the fairness of their own higher level manager as well as the spatial distance between their own and their higher level manager's typical working locations. We used ratings provided by colleagues as the dependent variable because such ratings are likely to be more reliable than self-reports or subordinate ratings, which may be prone to biases due to attributions of charisma or social desirable answering (Shamir, 1992). In addition, colleagues (themselves lower level managers) are more likely to be

better informed about the kind of procedures a lower level manager is supposed to enact than subordinates (Camps, Decoster, & Stouten, 2012).

Method

Respondents and procedure. Our respondents were drawn from a representative sample of the Dutch working population. All were voluntary participants in a large, permanent Dutch research panel that is independently managed. The panel has occasionally been used to collect data for previous scholarly research (e.g., Hoogervorst, De Cremer, & Van Dijke, 2010). For their participation, they received credit points that allowed them to choose certain gifts (e.g., movie tickets). In total, 2127 members of the panel displayed the required characteristics for this study (i.e., employed for 12 hours per week, having a supervisor, and themselves also supervising employees). These were contacted via e-mail message to their personal inboxes. Of these, 893 focal managers responded, a total response rate of 42%. The focal managers also invited a colleague (i.e., a fellow lower level manager) to respond to a number of items. Seventy-five colleagues participated. Colleagues of the focal managers were not necessarily panel members; vouchers that could be used for online purchases were raffled off among them.

Of the focal managers, 34 were female (45.3 %), $M_{\text{age}} = 44.60$, $SD = 10.74$. The focal managers supervised an average of 2.44 employees ($SD = 2.06$) and had worked in their current organization for an average of 11.83 years ($SD = 10.16$), and in their current job for an average of 7.38 years ($SD = 7.41$). Of the colleagues, 20 were female (26.7 %), $M_{\text{age}} = 48.42$, $SD = 9.04$. Colleagues supervised an average of 2.75 employees ($SD = 2.05$) and had worked at their current organization on average for 14.42 years ($SD =$

9.09), and in their current job for 9.00 years ($SD = 7.09$).²

Measures. To assess the focal manager's *procedural fairness experience*, focal managers completed Colquitt's (2001) seven-item procedural fairness scale to rate the procedural fairness enactment of their own higher level manager. The Colquitt scale, currently by far the most used scale to measure procedural fairness experience (Colquitt et al., 2013), asks participants to rate the fairness of procedures used for a specific work-related episode. We used remuneration negotiations as a target for this scale as it is an event that most employees experience at some point in their career. Item examples are "[h]ave you been able to express your feelings and opinions during those procedures?" and "[h]ave those procedures upheld ethical and moral standards?" Responses ranged from 1 (*not at all*) to 7 (*very much so*).

To measure *spatial distance* between focal managers and their supervisors, focal managers reported the distance, in meters, between their usual place of work and that of their higher level manager. To assess *procedural fairness enactment* by the focal manager, we asked colleagues to rate the procedural fairness enacted by their colleague when making important decisions involving subordinates (i.e., relating to promotion and/or awarding an annual bonus). Colleagues completed the same seven items from the Colquitt (2001) scale as the focal managers, but this time the focal manager was the target. An example of an item is "Does this colleague allow employees to express their feelings and opinions during those procedures?"). Responses ranged from 1 (*not at all*) to 7 (*very much so*).

² The matched focal managers did not differ significantly on any of the variables of interest from the non-matched focal managers with two exceptions. Matched focal managers were slightly older than average ($p = .04$) and had worked in their organization for longer ($p = .04$), perhaps because longer organizational tenure makes it easier to find a colleague willing to complete a survey. Intercorrelations between the variables did not differ significantly between the matched and non-matched focal managers.

Results

Table 1 presents scale means, standard deviations, reliabilities, and correlations. We conducted hierarchical regression analysis, with age, gender, and organizational tenure added as control variables in step 1³. We added the main effects of the predictor variables (procedural fairness rated by the focal manager and spatial distance) in step 2. We added the interaction between these two variables (based on mean-centered scores) in step 3.

Table 2 presents the results of the regression analysis. Most importantly, this analysis revealed a significant interaction between the procedural fairness experience of the focal manager and spatial distance in the expected direction. We used a regions-of-significance approach developed by Johnson and Neyman (1936) to further probe this interaction (see also Bauer & Curran, 2005). This technique avoids having to define necessarily arbitrary moderator (here: spatial distance) values as “low”, “moderate”, or “high”. Instead, it identifies the region for which the effect of the independent variable (procedural fairness experience) on the dependent variable (procedural fairness enactment) is significantly positive (indicating assimilation) or negative (indicating contrast). We found a positive relation, $p < .05$ (one-sided), between procedural fairness experience and enactment for distances of more than .31 standard deviations below the mean, indicating assimilation, and a negative relation, $p < .05$ (one-sided), for distances 1.02 standard deviations above the mean, indicating contrast (see Figure 2). Effect sizes ranged between $f^2 = .02$ and $f^2 = .04$ for the lower values (i.e., values .31 standard deviations below the mean and smaller) and $f^2 = .01$ and $f^2 = .02$ for higher values (i.e.,

³ When running the analyses without our control variables, the significance level and direction of our effects did not change. Control variables were included as previous research shows these variables to be associated with either procedural fairness experience or enactment (McFarlin & Sweeney, 1992).

values 1.02 standard deviations above the mean).

Insert Table 1, Table 2 and Figure 2 about here

STUDY 2

Study 1 provided initial evidence for our prediction that spatial distance moderates the relationship between procedural fairness experience and procedural fairness enactment. However, as Study 1 was based on a cross-sectional survey, these results are insufficient to infer causality. We therefore conducted a laboratory experiment to provide causal evidence for our predicted relationships.

Method

Participants and design. One hundred and fifty undergraduate business students, $M_{\text{age}} = 19.66$, $SD = 1.93$, 54 females (36 %), at a European university participated in this study for partial fulfillment of course credit. They were randomly assigned to a 2 (procedural fairness experience; fair vs. unfair) X 2 (supervisor distance; close vs. distant) between-subjects factorial design.

Procedure. Before the experimental procedure, we asked participants to complete a few standard individual difference measures⁴. Participants were then informed that they would play the role of a middle manager in a simulated company and would receive several messages from other members of the organization to which they would have to respond. They were further informed that their team consisted of two lower level employees and that they were responsible to one supervisor. Participants were told they

⁴ Results of which are not reported. These data were purely collected to reinforce our cover story and were not used for any other purpose.

would have to make a number of decisions, which were important for their employees later on (e.g., decisions about task allocation, remuneration).

We used the same procedure as in our Pilot Study to manipulate the spatial distance between the higher level manager and our participants: we told our participants that their supervisor was either located in the same lab (close condition) or in a lab on the other side of the campus (distant condition). We told participants that they would be working on one of two different tasks. The first was described as a fun and creative task in which they could win a cash bonus when completed satisfactorily. The other task was described as a boring, repetitive, and non-paying task. Participants could indicate which of the two tasks they preferred but were also told that the supervisor would make the final decision about the task allocations. In reality, all participants were assigned to the non-paying task.

At this point, we introduced our procedural fairness manipulation: we manipulated the manner in which the supervisor justified the decision to allocate the less attractive (i.e., non-paying) task to our participants. In the fair condition, participants received a message from the supervisor saying that (s)he had decided to allocate the less attractive task to them based on the results of the test they had completed before taking part in the study. In the unfair condition, the supervisor informed the participants that (s)he was not interested in their preferences because (s)he “could not be bothered” with “such a menial task” and gave no further reasons as to why the participants were allocated the non-paying task. This manipulation is in line with common conceptualizations of procedural fairness (Colquitt, 2001), especially transparency and accuracy (De Cremer, 2004). Afterwards, we collected our dependent measures.

Specifically, we asked participants to indicate whether they, themselves, were willing to incorporate a common principle of procedural fairness (i.e., timeliness, the extent to which important information is provided in time, e.g., Gilliland, 1993) in their decision-making.

Fairness manipulation check. We asked participants to indicate on a seven-point Likert scale whether they thought the supervisor acted “fairly” and “ethically” in allocating the less attractive task to them. We averaged these two measures into a two-item scale measuring the perceived fairness of the supervisor’s behavior ($\alpha = .74$). Even though fairness and ethicality are not measures of the same construct, we found a strong relation between the two, $r = .60$, $p < .001$. Given that most of the existing research on trickle-down effects in organizations is related to ethical leadership issues (Mayer et al., 2009), we decided to measure ethicality as well as fairness perceptions.

Task attractiveness. To assess whether participants indeed found the lucrative task to be more attractive, we asked them to indicate which of the two tasks they would prefer.

Dependent measure. By focusing on whether participants wanted to delay important decisions about their employees’ outcomes, our dependent measures focused on a core dimension of procedural fairness (see e.g., Gilliland, 1993; Truxillo, Bauer, Campion, & Paronto, 2002). We used timeliness because the supervisor in the unfair condition had already violated both the procedural fairness rules of accuracy and of voice.

We measured timeliness with three items on a 7-point Likert scale referring to the important decisions that the participant supposedly had to make: (1) “Would you prefer

to wait with taking decisions about your employees or do you want to decide immediately?” anchored in “wait” and “decide immediately”; 2) “When would you like to decide about the allocation of tasks to your employees?” (reverse scored); and 3) “When would you like to decide about the allocation of a bonus to your employees?” (reverse scored; $\alpha = .75$). These items are in line with common conceptualizations of timeliness within the procedural fairness literature (Gilliland, 1993; Truxillo et al., 2002).

Results

Task attractiveness. Of our 150 participants, 148 indicated that they preferred the paying, less tedious task. The two participants who did not prefer the paying task were excluded from subsequent analyses⁵. A logistic regression with supervisor fairness, supervisor distance, and the interaction between these factors as categorical independent variables did not reveal any effects on task attractiveness (all $ps > .9$).

Manipulation checks. A 2 x 2 analysis of variance (ANOVA) with supervisor distance and supervisor fairness as the independent variables, and participants’ evaluations of supervisor fairness as the dependent variable, revealed a significant main effect for supervisor fairness, $F(1, 146) = 28.14, p < .0001, \eta^2 = .16$. Participants were significantly more likely to view the fair supervisor as acting fairly, $M = 4.58, SD = 1.39$, than the unfair supervisor, $M = 3.38, SD = 1.36$. There was no significant main effect for distance ($p = .73$), nor a significant distance by supervisor fairness interaction effect ($p = .96$).

Hypotheses test. In line with our prediction, a 2 x 2 ANOVA revealed a significant supervisor distance by supervisor fairness interaction effect on timeliness

⁵ Results for the hypotheses tests and manipulation checks were the same regardless of whether we included the two participants who indicated a preference for the non-paying task or not.

enactment, $F(1, 146) = 4.15, p = .04, \eta^2 = .03$. We did not find a significant main effect for spatial distance, $F(1, 146) = 1.49, p = .22$, or for supervisor fairness, $F(1, 146) = .07, p = .79$. Figure 3 depicts this interaction. Follow-up analyses showed that participants in the close supervisor condition were less likely to decide promptly after having been treated unfairly, $M = 4.74, SD = 1.59$, than after having been treated fairly, $M = 5.23, SD = 1.10, F(1, 146) = 2.53, p = 0.06$. In contrast, distant participants decided more promptly after having been treated unfairly, $M = 5.43, SD = 1.07$, than after having been treated fairly, $M = 5.06, SD = 1.07, F(1, 146) = 1.64, p = .1$.

 Insert Figure 3 about here

STUDY 3

Studies 1 and 2 showed that spatial distance moderates the relation between higher level procedural (un)fairness and lower level fairness enactment. In our introduction, we argued that spatial distance might reveal these effects because it is an antecedent of relational-interdependent self-construal. In Study 3, we set out to explicitly test the moderating role of relational-interdependent self-construal on the relationship between the experience and enactment of procedural fairness.

Method

Respondents and procedure. We used Mechanical Turk to recruit 228 working adults, $M_{\text{age}} = 33.61; SD = 10.08$; 95 women (42.2%). All respondents were employed in a lower level management role, i.e., each respondent was supervised by a higher level manager and they, themselves, supervised employees as well. On average, our

respondents worked 39.95 hours per week ($SD = 10.9$) and supervised an average of 11.2 employees ($SD = 20.18$). Our participants had an average of 12.49 years ($SD = 9.51$) of working experience and had been employed at their current organization for an average of 4.71 years ($SD = 4.87$) and in their current position for an average of 4.86 years ($SD = 4.42$). All participants were paid \$ 0.85 for their participation.

Measures. We used the same scale as in Study 1, developed by Colquitt (2001) to measure our respondent's *procedural fairness experience*. As in Study 1, we again asked our participants to rate the fairness of their last remuneration negotiations. We measured *relational-interdependent self-construal* with the same relational-interdependent self-construal scale developed by Cross et al. (2000) that we used in the Pilot Study, and which was adapted so that the supervisor was the target. We measured *fairness enactment* with the *voice enactment* scale developed by Brebels and colleagues (2011; e.g. “[a]re you willing to give your subordinates a say in your decisions about their performance?”).

Results

Table 3 presents scale means, standard deviations, reliabilities, and correlations. As in Study 1, we conducted a hierarchical regression analysis, with age, gender, and organizational tenure added as control variables in step 1⁶, main effects of the predictor variables (procedural fairness and relational-independent self-construal) in step 2, and the interaction between these variables (based on mean-centered scores) in step 3. Table 4 presents the results of the regression analyses. Most importantly, this analysis revealed a significant self-construal by procedural fairness interaction effect in the expected direction.

⁶ When running the analyses without our control variables, the significance level and direction of our effects did not change.

We again used a regions-of-significance approach to probe this interaction. We found a significant negative effect ($p < .05$) of procedural fairness for levels of relational-interdependent self-construal of below 1.22, indicating contrast, and a positive effect for levels of relational interdependent self-definition of levels higher than 2.43, indicating assimilation. Effect sizes ranged between $f^2 = .01$ and $f^2 = .03$ for low values (values below 1.22) and between $f^2 = .01$ and $f^2 = .33$ for higher values (values above 2.43).

Insert Table 3 and 4 and Figure 4 about here

STUDY 4

Studies 1 and 2 indicated that spatial distance moderates the relation between the procedural fairness experience of lower level managers and their own procedural fairness enactment, in such a way that close lower level managers adopt an assimilatory stance, whereas distant lower level managers adopt a contrasting stance towards higher level unfairness. Study 3 showed a similar effect for relational-interdependent self-construal: high levels of relational-interdependent self-construal were associated with assimilation in fairness enactment, whereas low levels were associated with contrast. Although our Pilot Study showed that spatial distance affects relational-interdependent self-construal, none of our studies have provided evidence that this association actually explains (i.e., mediates) the moderating effect of spatial distance. We conducted Study 4 with this aim in mind. Specifically, we set out to test a model (see Figure 1) in which relational-interdependent self-construal mediates the moderating effect of spatial distance.

Study 4 also aims to test for the effects of a set of theoretically and practically

interesting antecedents of relational-interdependent self-construal, in addition to spatial distance. Distance is a multi-faceted and complex phenomenon (Williams & Bargh, 2008) that is (cor)related to a number of other variables, some of which might, at least partly, explain its moderating effects. Specifically, we measured perceived autonomy (Kagitcibasi, 2005), perceived similarity (Yamada & Singelis, 1999), and several measures of interpersonal and psychological closeness (Holland, Roeder, Van Baaren, Brandt, & Hannover, 2004) and tested for their effects. All of these variables have been linked in one way or another with self-construal and with reactions to unfairness (e.g., De Cremer, Tyler, & Ouden, 2005; Lavelle et al., 2009; Schminke, Ambrose, & Cropanzano, 2000).

Method

Respondents and procedure. We recruited adults who were all employed as middle managers in their respective organizations (average number of subordinates: 18.40, $SD = 61.02$) through Amazon Mechanical Turk. In total, we collected 192 useable observations ($M_{\text{age}} = 31.95$, $SD = 9.65$). Respondents indicated that they worked an average of 41.02 hours per week ($SD = 11.24$) and had been employed for an average of 10.47 years ($SD = 9.75$). They had worked at their current organization for an average of 4.02 years ($SD = 3.93$) and at their current position for an average of 4.58 years ($SD = 4.05$). All respondents were paid \$ 1.50 for their participation.

Measures. We measured *relational-interdependent self-construal* with the same scale that we used in the Pilot Study and Study 3 – the interdependent self-construal scale by Cross and colleagues (Cross et al., 2000), which we adapted so that the supervisor was the target. We measured *procedural fairness experience* of our focal managers by using

the Colquitt procedural fairness scale (Colquitt, 2001) that we also used in Study 1 and Study 3. As in Study 3, we measured procedural *fairness enactment* with the *voice enactment* scale developed by Brebels and colleagues (2011).

We measured *perceived autonomy* using a scale developed by Langfred (2000). This scale consists of four items (e.g., “To what extent do you have control over the rules and regulations at your workplace”). Reliability was relatively low ($\alpha = .58$), so we deleted the first item (“To what extent do you feel constrained by the rules and regulations in your current workplace?”), which brought reliability up to acceptable levels. We measured *psychological closeness* using three measures. First, we included a self-developed scale, consisting of six items (e.g., “How close do you feel to your boss?”). Secondly, we employed the frequency and strength subscales of the relationship closeness inventory developed by Berscheid, Snyder, and Omoto (1989). The *frequency* subscale asks respondents to indicate how much time they spend interacting with another (i.e., the supervisor) in the past week as well as in a typical week. These two measures were not significantly correlated, $r = .07$, $p = .31$, so we refrained from computing a scale. The *strength* subscale, comprising thirty items, allows respondents to rate how much influence their supervisor has over important domains of life (e.g., financial security, and marriage). To assess *spatial distance*, we asked respondents to indicate how far, on average, their boss was removed from them. To increase reliability of this measure, we also asked respondents to indicate how far away their boss was on the day they participated in the study, on the day before, and on the current day but the week before the day the respondents participated. These measures were highly correlated (r s between .8 and -.9) and averaged into a scale. We measured *perceived similarity* using

the scale developed by Kühnen and Hannover (2000) in which participants report how similar they think another (i.e., the supervisor) would behave across different social situations (e.g., at a party, during a meeting etc.).

Results

Means, correlations and reliabilities of our measures can be found in Table 5.

Insert Table 5 about here

Perceived autonomy, perceived similarity, psychological closeness, and interpersonal closeness were all significantly and positively correlated with relational-interdependent self-construal. We found a significant negative correlation between spatial distance and relational-interdependent self-construal. These correlations are broadly in line with correlations found in previous studies (e.g., Cross, Gore, & Morris, 2003; Holland et al., 2004; Kagitcibasi, 1996). The reason why autonomy and relational-interdependent self-construal were found to be positively related might be that leader-follower dyads need to rely on other forms of social coordination as autonomy increases, which may be reflected by higher levels of relational-interdependent self-construal (Howell & Shamir, 2005). Another interesting finding was related to the overall lack of correlation of the strength of interpersonal closeness measures with many of the other antecedents, bar psychological closeness. This seems to indicate that the influence of the supervisor over many areas of life (which is primarily measured by this scale) tends to be unrelated to formal constraints (as measured by perceived autonomy).

We were first interested to see which, if any, of our purported antecedents were

related to relational-interdependent self-construal. We thus conducted a multivariate regression analysis with self-construal as the dependent variable and the purported antecedents (i.e., spatial distance, perceived similarity, perceived autonomy, and our three measures of psychological distance) as predictors. Spatial distance, $\beta = -.61, p < .01$, was significantly and negatively related to interdependent self-construal. Larger distances were thus related to lower levels of relational-interdependent self-construal. Of the psychological closeness measures, our own measure, $\beta = .16, p = .05$, and the strength subscale of the relationship closeness inventory, $\beta = .45, p < .0001$ were both positively related to relational-interdependent self-construal. Hence, stronger feelings of psychological closeness were positively related to higher levels of relational-interdependent self-construal. Both frequency measures of the relationship closeness inventory were unrelated to relational-interdependent self-construal, $\beta_{\text{this week}} = .0004, p = .36$; $\beta_{\text{typical week}} = -.0002, p = .35$. Perceived similarity was positively related to relational-interdependent self-construal, $\beta = .15, p < .001$, as was perceived autonomy, $\beta = .20, p < .001$.

We then tested the relationship of self-construal, procedural fairness experience, and the interaction between these two with our dependent variable (voice enactment). This regression analysis uncovered a significant interaction in the expected direction, $\beta = .12, t = 4.70, p < .01$. Figure 5 visually represents this relationship. We again used a regions-of-significance approach to probe this interaction. We found a significant negative effect, $p < .05$ (one-sided), of procedural fairness experience on voice enactment for levels of relational-interdependent self-construal below 1.01, indicating contrast. We found a significant positive relation for levels were above 2.69, $p < .05$ (one-sided),

indicating assimilation. Effect sizes ranged between $f^2 = .01$ and $f^2 = .05$ for low values (values below 1.01) and $f^2 = .01$ and $f^2 = .15$ for high values (values above 2.69). This interaction is depicted in Figure 5.

 Insert Figure 5 about here

We proceeded to test the interaction effect of each of the antecedents that were found to be significantly related to self-construal above (i.e., spatial distance, autonomy, similarity, psychological distance (our own scale), and the strength subscale of the relationship closeness inventory, with procedural fairness experience in the same hierarchical regression model. We decided to simultaneously test these interactions because we were primarily interested in their effects while controlling for the effect of the other antecedents. Of these interactions, we only found a significant spatial distance by procedural fairness interaction effect, $\beta = -.18$, $p < .05$ (see Figure 6 below). As before, we used a regions-of-significance approach to probe this interaction. We found a positive relation, $p < .05$ (one-sided), between procedural fairness experience and enactment for levels lower than .41 standard deviations below the mean, indicating assimilation of physical distance and a negative effect, $p < .05$ (one-sided), for levels higher than .24 standard deviations above the mean, indicating contrast. Effect sizes ranged from $f^2 = .01$ to $f^2 = .03$ for low values (values below .41 standard deviations) and from $f^2 = .01$ to $f^2 = .05$ for high levels (values above .24 standard deviations above the mean).

We did not find significant interactions for autonomy, $\beta = .04$, $p = .12$, similarity, $\beta = -.004$, $p = .87$, psychological closeness (our own scale), $\beta = .08$, $p = .08$, or strength

of interpersonal closeness, $\beta = -.03$, $p = .13$, indicating that none of these constructs could be identified as a moderator of fairness effects in our data. Based on these results, we concluded that that self-construal mediates the effects of spatial distance on the fairness experience enactment relation.

 Insert Figure 6 about here

We subsequently tested whether the effect of spatial distance on the relation between procedural fairness experience and procedural fairness enactment was mediated by self-construal. This requires testing a model in which the moderating effect of spatial distance is mediated by self-construal (Muller, Judd, & Yzerbyt, 2005). There are, however, no options to test for simple indirect effects in such a model (Hayes, 2012; Rucker, Preacher, Tormela, & Petty, 2011). We therefore treated spatial distance as the independent variable and procedural fairness experience as the moderator to assess simple indirect effects in both analyses, as recommended by Hayes (2012).

We found a significant effect of spatial distance on relational interdependent self-construal, $\beta = -.52$, $p < .05$. We also found a significant self-construal by fairness experience interaction effect, $\beta = -.11$, $p = .01$, but no significant spatial distance by fairness experience interaction effect, $\beta = -.26$, $p = .7$, indicating mediation (Rucker et al., 2011). Bootstrapped indirect effects supported this. Specifically, the results showed that the effect of spatial distance through relational-interdependent self-construal was positive for low levels of procedural fairness experience, $b = .08$, 90% CI [.004; .42], thus indicating that higher distances were associated with higher levels of fairness enactment

when fairness experience was relatively low; that is: assimilation for relatively small distances and contrast for relatively large ones. In contrast, the effect of spatial distance was not significant for high procedural fairness experience, $b = -.07$, 90% CI [.02; -.31]. This model thus indicated assimilation effects for lower distances and contrast effects for higher distances. As before, we controlled for age, gender, and organizational tenure in all analyses reported above.⁷ Taken together, these results support our hypotheses.

GENERAL DISCUSSION

The results of this research indicate that lower level fairness enactment in organizations is influenced interactively by two variables that are related to actors higher up in the organization: higher level (un)fairness experienced by enacting managers as well as their relational-interdependent self-construal that is embedded in their relationship with higher level management. Specifically, we showed that lower level managers tend to assimilate unfair treatment from higher level management when relational-interdependent self-construal is relatively high. That is, when these managers experience higher level unfairness they are less likely to enact fair procedures themselves. In contrast, when relational-interdependent self-construal was low, we found that lower level managers were more likely to adopt a contrasting stance in response to higher level unfairness. That is, these managers were more likely to enact fair procedures when confronted with higher level unfairness.

We also showed that relational-interdependent self-construal is embedded within

⁷ We additionally ran the same models without control variables. None of the results we report here as being significant became insignificant, nor did any of the results that we report as significant become insignificant, but one: we found a marginally significant moderation effect of interpersonal closeness on the relation between procedural fairness experience and enactment, $\beta = -.15$, $p = .07$. As for the mediation analysis of interpersonal closeness, we found evidence for mediation for high levels of procedural fairness experience, $b = .11$, 90% CI [.27; .03], but not for low procedural fairness experience, $b = .01$, 90% CI [-.07; .13].

the social and physical reality of the organization: relational-interdependent self-construal is associated with psychological closeness, perceived autonomy, perceived similarity, and spatial distance. In fact, we found that spatial distance moderates the relationship between procedural fairness experience and procedural fairness enactment exactly because of this association with relational-interdependent self-construal. Taken together, our results show that higher level influence on the behavior of lower level managers can lead to more *similar* or more *dissimilar* behavior down the line, and that this is determined by self-construal and spatial distance.

Theoretical implications

Procedural fairness is a socially and hierarchically embedded practice; that is: fairness perceptions are socially constructed and fairness expectations are fueled by interpersonal observations and inferences (Folger & Bies, 1989; Lamertz, 2002; Lind, Kray, & Thompson, 1998). Our results extend this understanding of procedural fairness as a social practice in significant ways by looking at the domain of procedural fairness enactment and examining how social influence across hierarchies in organizations plays a role there. In light of this approach, our findings clearly show that we cannot regard procedural fairness enactment as an isolated phenomenon unique to the enacting managers themselves, or their relationship with employees (Blader & Chen, 2012; Seppälä et al., 2012). Rather, fairness enactment should be seen as the result of a complex interplay of organizational forces, of which the behavior of higher level managers and variables pertaining to the physical environment (i.e., especially spatial distance) of the organization play an important role. Fairness enactment, therefore, is best studied as an embedded phenomenon that reflects influences by the wider social, physical, and

organizational context (Popper, 2013).

From this point of view, it is clear that our research has important implications for the literature on trickle-down effects, a term that refers to higher level management influencing employees further down the hierarchy by affecting the behavior of lower level managers (Aryee et al., 2007; Mayer et al., 2009). To date, this literature has mainly assumed that behavior of higher level management leads to *similar* behavior further down the line (e.g., Masterson, 2001; Mayer et al., 2009). The argument here builds on social learning processes suggesting that people tend to use high-status others as role models to determine when and which behavior is acceptable (Bandura, 1986). We agree that social learning processes likely play a role in the explanation of these effects. However, organizational members at lower level of the organizational hierarchy may not always model (assimilate) unacceptable behaviors of their leaders. Given this organizational reality, it is surprising that – as far as we know – no research has yet investigated the possible effects of lower level contrasting behavior. Consequently, our results are an important extension of the literature as they indicate a necessity of more scholarly attention to contrasting effects of higher level management behavior on lower level management behaviors in general, and in terms of procedural fairness enactment specifically.

Although it has been suggested before that relational-interdependent self-construal can be a relevant moderator of employee responses to (un)fair treatment (e.g., Johnson, Selenta, & Lord, 2006), we believe that our results have some implications for the literature on responses to procedural fairness as well. First, as far as we know, virtually all studies have focused on dispositional or chronic interdependent self-construal

(see e.g., Brockner, De Cremer, Van den Bos, & Chen, 2005). In this paper, however, we focus on the extent to which the relation with one *specific* other (the supervisor) is important for the definition of the self (Kwong & Lueng, 2002). We argue that especially this construct is an important influence on reactions to higher level (un)fairness, which, of course, often emanates from a specific person. While chronic interdependent self-construal is most likely correlated with this measure of relational-interdependent self-construal, we cannot be sure that the relation with higher level management has self-definitional consequences, even for lower level managers with high chronic interdependent self-construal. Additionally, this framework offers the opportunity to describe and discuss *positive* reactions to unfair treatment, a possibility that has hardly received any attention in the literature (Cropanzano, Byrne, Bobocel, & Rupp, 2001).

Just like we showed that fairness enactment is a phenomenon embedded in the social and hierarchical reality of the organization, we also revealed that relational-interdependent self-construal is, at least partly, a function of the physical reality in which organizational members are active, of which spatial distance is an important element. In essence, our argument is that relational-interdependent self-construal is, at least in part, a psychological representation of physical distances between (in our case) subordinate and supervisor. These results thus underscore the importance of considering how variables from our physical environment affect processes that are traditionally considered psychological and/or organizational (see e.g., Grant, Fried, Parker, & Frese, 2010). This argument fits well with the job design literature, which shows how objective physical variables, such as the presence of natural light in a work environment (Wineman, 1982) as well as distance between co-workers (Szilagyi & Holland, 1980), affect employee

performance and well-being. Although the importance of objective physical variables, such as spatial distance, for organizational processes is widely recognized in that and other literatures, the fairness literature has been relatively lacking in this regard (Brockner et al., 2001). With our present studies, we hope to have set a first step to correct this gap.

Another interesting observation is that our results, particularly those of Study 4, indicate that spatial distance directly (i.e., unmediated by psychological variables such as perceived autonomy and psychological closeness) affects relational-interdependent self-construal. Other variables, including perceived autonomy, psychological closeness, and perceived similarity were found to influence relational-interdependent self-construal, but played no moderating role in the relationship between procedural fairness experiences and procedural fairness enactment. We are hesitant to interpret null-findings, but we believe, at the very least, that these results underscore the importance of considering spatial distance as a variable of interest in organizational research. We have suggested that spatial distance is related to fundamental cognitive and affective mechanisms and, therefore, may have a more pervasive effect than that of more typically studied organizational variables such as perceived autonomy or perceived similarity. We do not argue that spatial distance has an exclusive effect such that relational-interdependent self-construal or the relationship between procedural fairness experience and enactment would be solely dependent on spatial distance. However, we do believe that our results show that it is impossible to slice up the (organizational) reality into neat portions (e.g., ‘physical’, ‘social’, ‘psychological’ and so on) since variables from these different levels are often likely to be related in potentially surprising ways.

Practical implications

Our results underline the importance of the enactment of fair procedures throughout the organization, but particularly at higher levels of the organization. Our results indicate that higher level unfairness, especially when relational-interdependent self-construal is high, might influence lower level procedural unfairness and may thus plausibly affect the spread of procedural unfairness throughout the organization. Unfair procedures enacted throughout the organization have been identified as a major source of employee dissatisfaction, lower organizational commitment, and increased employee turnover (Colquitt, Noe, & Jackson, 2002). However, given the lack of direct contact, higher level management may have relatively little information on the procedural fairness needs of employees multiple levels down in the organization. Research has indicated that supervisors should be sensitive to the needs of subordinates to ensure that their enactment of procedures is perceived as fair (Hoogervorst, De Cremer, & Van Dijke, 2013). Although the enactment of fair procedures is clearly desirable at any level, designing and enacting procedures that are perceived to be fair throughout the organization is likely to be a tall order at higher levels of the organization.

Additionally, our results highlight the importance of the psychological effects of changing the physical reality in which work takes place, especially in terms of spatial distance between levels of management. Spatial distances between hierarchical levels within many organizations are growing due to new (information) technologies, and organizations need to consider how these changes affect working relations (Avolio et al., 2014). In this paper, we identify one important psychological process that is likely to be affected when distances grow: relational-interdependent self-construal. Our results

indicate that the average level of relational-interdependent self-construal is likely to decrease when an organization conducts its operations across wider spatial areas. This indicates that management processes that rely on high levels of relational-interdependent self-construal, such as role-modeling, no longer suffice to influence lower level behavior. Organizations should thus be aware of the potential challenges involved in managing lower level management (and employees) when expanding geographically.

Strengths, limitations, and suggestions for future research

A first limitation of our research is that the effective sample size of Study 1 was relatively small. Over the years, several scholars have been calling attention to the lack of statistical power in many behavioral studies and the associated problems that result from small sample sizes (e.g. Sedlmeier & Gigerenzer, 1989; Nelson, Simmons, & Simonsohn, 2012). A lack of total power (i.e., the product of the power-levels found in the individual studies) in a multiple-study paper may contribute to obtaining results with relatively low levels of reliability and replicability (Schimmack, 2012). Yet, the fact that we were able to replicate the findings of Study 1 in sufficiently powered studies, such as Study 3 and 4 increases our confidence in the results of Study 1.

Secondly, as we tested exclusively directional hypotheses when it came to simple effects, we relied on one-sided tests throughout the paper rather than more conservative two-sided tests. However, none of our conclusions would have been substantially affected if we had used two-sided tests: all our effects reported as significant would remain significant, apart from the simple effects reported in Study 2. Nonetheless, as shown persuasively by Schimmack (2012), the general lack of total power of behavioral multiple-study papers, ours not excluded, makes it very unlikely that we would have

obtained significant results across a set of studies. We believe that the results of Study 2 should be seen in this light. The fact that simple effects in our other studies, in which we employed different samples and data collection methods, were also two-sidedly significant make us confident that both contrast as well as assimilation effects in the context of fairness enactment indeed exist.

Another potential limitation of our research is that we had to rely on single-source field data in both Study 3 and 4. Reliance upon single-source data, however, is not at all uncommon in the trickle-down and in the fairness enactment literature (e.g., Brebels et al., 2011; Cornelis et al., 2006). Despite this, it is well known that this type of data cannot be used to draw causal inferences, and that common method variance might be an issue. However, it has also been suggested that common method variance may not actually be a substantial problem in organizational research (Crampton & Wagner, 1994) and that it does not play a role for interaction effects (Evans, 1985), the main focus of our study. A related issue might be our reliance on self-reported measures in Study 3 and 4. However, a recent meta-analysis (Berry, Carpenter, Nichelle, & Barrat, 2012) showed that, at least for the related construct of organizational citizenship behaviors, self-report measures were at the very least equivalently reliability and may actually be superior to other-reported measures. Notwithstanding all this, large scale multisource field studies, in addition to other research designs (e.g., experimental studies), may be needed in this literature.

CONCLUSION

Our results demonstrate that higher level management unfairness can have detrimental effects throughout the organization, particularly when lower level

management assimilates unfair behavior at higher levels. Fortunately, lower level managers respond to unfairness by becoming more fair themselves under certain conditions, for instance, when spatial distance is high and/or the interdependent self-construal is low. Our results point to the perils of overly close and highly interdependent relationships between lower and higher management in the organization. Managers at all levels in the organization need to strike a balance between a certain sense of closeness to ensure efficiency and some sense of distance to ensure that negative top-level behavior does not spread unhindered through all layers of the organization.

REFERENCES

- Ambrose, M.L., Schminke, M. & Mayer, D.M. (2013). Trickle-down effects of supervisor perceptions of interactional justice: A moderated mediation approach. *Journal of Applied Psychology*, 98: 678-689.
- Aryee, S., Chen, Z. X., Sun, L.-Y. & Yaw D. (2007). Antecedents and outcomes of abusive supervision: Test of a trickle-down model. *Journal of Applied Psychology*, 92: 191-201.
- Ashfort, A.E. & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14: 20-39.
- Avolio, B.J., Sosik, J.J., Kahai, S.S. & Baker, B. (2014). E-leadership: Re-examining transformations in leadership source and transmission. *Leadership Quarterly*, 25: 105-131.
- Bandura, A. (1986). *Social foundations of thought & action*. Englewood Cliffs, NJ: Prentice-Hall.
- Bauer, D.J., & Curran, P.J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, 40, 373 – 400.
- Berry, C.M., Carpenter, N.C., & Barrat, C.L. (2012). Do other-reports of counterproductive work behavior provide an incremental contribution over self-reports? A meta-analytic comparison. *Journal of Applied Psychology*, 97: 613-636.
- Berscheid, E., Snyder, M. & Omoto, A.M. (1989). The Relationship Closeness Inventory: Assessing the closeness of interpersonal relationships. *Journal of Personality*

and Social Psychology, 57: 792-807.

- Berthold, A., Mummendey, A., Kesler, T., Luecke, B. & Schubert, T. (2012). When different means bad or merely worse. How minimal and maximal goals affect ingroup projection and outgroup attitudes. *European Journal of Social Psychology*, 42: 68-690.
- Blader, S.L. & Chen, Y. (2012). Differentiating the effects of status and power: A justice perspective. *Journal of Personality and Social Psychology*, 102: 994-1014.
- Brebels, L., De Cremer, D., Van Dijke, M. & Van Hiel, A. (2011). Fairness as social responsibility: A moral self-regulation account of procedural justice enactment. *British Journal of Management*, 22: 47-58.
- Brockner, J., Ackerman, G., Greenberg, J., Gelfand, M. J., Francesco, A. M. F., Chen, Z. X., Leung, K., Bierbrauer, G., Gomez, C., Kirkman, B. L., & Shapiro, D. (2001). Culture and procedural justice: The influence of power distance on reactions to voice. *Journal of Experimental and Social Psychology*, 37: 300-315.
- Brockner, J., De Cremer, D., Van den Bos, K. & Chen, Y. (2005). The influence of interdependent self-construal on procedural fairness effects. *Organizational Behavior and Human Decision Processes*, 96: 155-167.
- Brockner, J., Tyler, T.R. & Cooper-Schneider, R. (1992). The influence of prior commitment to an institution on reactions to perceived unfairness: The higher they are, the harder they fall. *Administrative Science Quarterly*, 37: 241-261.
- Brockner, J. & Wiesenfeld, B. (1996). An integrative framework for explaining reactions to decisions: Interactive effects of outcomes and procedures. *Psychological Bulletin*, 120: 189-208.

Brown, M. E. & Treviño, L.K. (2006). Ethical leadership: A review and future directions. *Leadership Quarterly*, 17: 595-616.

Camps, J., Decoster, S. & Stouten, J. (2012). My share is fair, so I don't care. The moderating role of distributive justice in the perception of leaders' self-serving behavior. *Journal of Personnel Psychology*, 11: 49-59.

Cialdini, R.B., Wosinka, W., Barrett, D.W., Butner, J. & Gornik-Durose, M. (1999). Compliance with a request in two cultures: The differential influence of social proof and commitment/consistency on collectivists and individualists. *Personality and Social Psychology Bulletin*, 25: 1242-1253.

Colquitt, J.A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86: 386-400.

Colquitt, J.A., Noe, R.A. & Jackson, C.L. (2002). Justice in teams: Antecedents and consequences of procedural justice climate. *Personnel Psychology*, 55: 83-109.

Colquitt, J. A., Scott, B.A., Rodell, J.B., Long, D.M., Zapata, C.P., Conlon, D.E., Wesson, M.J. (2013). Justice at the millennium, a decade later: a meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology*, 98: 199-236.

Cornelis, I., Van Hiel, A. & De Cremer, D. (2006). Effects of procedural fairness and leader support on interpersonal relationships among group members. *Group Dynamics: Theory, Research, and Practice*, 10: 309-328.

Crampton, S. M., & Wagner, J. A., III. (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology*, 79: 67-76.

- Cropanzano, R. & Stein, J. H. (2009). Organizational justice and behavioral ethics: Promises and prospects. *Business Ethics Quarterly*, 19: 193-233.
- Cropanzano, R., Byrne, Z.S., Bobocel, D.R. & Rupp, D.E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior*, 58: 164-209.
- Cross, S.E., Bacon, P.L. & Morris, M.L. (2000). The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology*, 78: 791-808.
- Cross, S.E., Gore, J.S. & Morris, M.L. (2003). The relational-interdependent self-construal, self-concept consistency, and well-being. *Journal of Personality and Social Psychology*, 85: 933 – 944.
- De Cremer, D. (2004). The influence of accuracy as a function of leader's bias: The role of trustworthiness in the psychology of procedural justice. *Personality and Social Psychology Bulletin*, 30: 293-304.
- De Cremer, D., Tyler, T.R. & Den Ouden, N. (2005). Managing cooperation via procedural fairness: The mediating influence of self-other merging. *Journal of Economic Psychology*, 26: 393-406.
- DeRue, D.S. & Ashford, S.J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review*, 35: 627-647.
- Evans, M. G. (1985). A Monte Carlo study of the effects of correlated method variance in moderated multiple regression analysis. *Organizational Behavior and Human Decision Processes*, 36: 305-323.

- Folger, R. & Bies, R. J. (1989). Managerial responsibilities and procedural justice. *Employee Responsibilities and Rights Journal*, 2: 79-90.
- Gilliland, S.W. (1993). The perceived fairness of selection systems: An organizational justice perspective. *Academy of Management Review*, 18: 694-734.
- Gino, F. & Galinsky, A.D. (2012). Vicarious dishonesty: When psychological closeness creates distance from one's moral compass. *Organizational Behavior and Human Decision Processes*, 119: 15-26.
- Grant, A.M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32: 393-417.
- Grant, A.M., Fried, Y., Parker, S.K. & Frese, M. (2010). Putting job design in context: Introduction to the special issue. *Journal of Organizational Behavior*, 31: 145-157.
- Griffin, D.W. & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, 67: 430-445.
- Hayes, Andrew F. (2012), "PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling," white paper, The Ohio State University, (accessed September 18, 2013), [available at <http://www.afhayes.com/public/process2012.pdf>].
- Holland, R.W., Roeder, U.R., Van Baaren, R.B., Brandt, A.C. & Hannover, B. (2004). Don't stand so close to me. The effects of self-construal on interpersonal closeness. *Psychological Science*, 15: 237-242.
- Hoogervorst, N., De Cremer, D. & Van Dijke, M. (2010). Why leaders not always

- disapprove of unethical follower behavior: It depends on the leader's self-interest and accountability. *Journal of Business Ethics*, 95: 29-41.
- Hoogervorst, N., De Cremer, D. & Van Dijke, Marius (2013). When do leaders grant voice? How leaders' perceptions of followers' control and belongingness needs affect the enactment of fair procedures. *Human Relations*, 66: 973-992.
- Howell, J.M. & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30: 96-112.
- Johnson, P.O. & Neyman, J. (1936). Tests of certain linear hypotheses and their application to some educational problems. *Statistical Research Memoirs*, 1: 57-93.
- Johnson, R.E., Selenta, C. & Lord, R.G. (2006). When organizational justice and the self-concept meet: Consequences for the organization and its members. *Organizational Behavior and Human Decision Processes*, 99: 175-201.
- Kagitcibasi, C. (1996). The autonomous-relational self: A new synthesis. *European Psychologist*, 1: 180-186.
- Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context. Implications for self and family. *Journal of Cross-Cultural Psychology*, 36: 403-422.
- Kark, R., & Shamir, B. (2002). The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. In B. J. Avolio, & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead*: 67-91. Oxford, UK: Elsevier Science.
- Kay, A.C., Wheeler, S.C., Bargh, J.A. & Ross, L. (2004). Material priming: The

influence of mundane physical objects on situational construal and competitive behavioral choice. *Organizational Behavior and Human Decision Processes*, 95: 83-96

Kemmelmeier, M. & Oysterman, D. (2001). The ups and downs of thinking about a successful other: self-construals and the consequences of social comparisons. *European Journal of Social Psychology*, 31: 311-320.

Kim, W.C. & Mauborgne, R.A. (1993). Procedural justice, attitudes, and subsidiary top management compliance with multinationals' corporate strategic decisions. *Academy of Management Journal*, 36: 502-526.

Kühnen, U. & Hannover, B. (2000). Assimilation and contrast in social comparisons as a consequence of self-construal activation. *European Journal of Social Psychology*, 30: 799-811.

Kwong, J.Y.Y. & Leung, K. (2002). A moderator of the interaction effect of procedural justice and outcome favorability: importance of the relationship. *Organizational Behavior and Human Decision Processes*, 87: 278-299.

Lamertz, K. (2002). The social construction of fairness: social influence and sense making in organizations. *Journal of Organizational Behavior*, 23: 19-37.

Landau, M.J., Meier, B.P. & Keefer, L.A. (2010). A metaphor-enriched social cognition. *Psychological Bulletin*, 136: 1045-1067.

Langfred, C.W. (2000). The paradox of self-management: Individual and group autonomy in work groups. *Journal of Organizational Behavior*, 21: 563-585.

Lavelle, J.J., Brockner, J., Konovsky, M.A., Price, K.H., Henley, A.B., Taneja, A., Vinekar, V. (2009). Commitment, procedural fairness, and organizational

- citizenship behavior: a multifoci analysis. *Journal of Organizational Behavior*, 30: 337-357.
- Linardatos, L. & Lydon, J.E. (2011). Relationship-specific identification and spontaneous relationship maintenance processes. *Journal of Personality and Social Psychology*, 101: 737-753.
- Lind, E. A., Kray, L., & Thompson, L. (1998). The social construction of injustice: Fairness judgments in response to own and others' unfair treatment by authorities. *Organizational Behavior and Human Decision Processes*, 75: 1-22.
- MacCoun, R.J. (2012). The burden of social proof: Shared thresholds and social influence. *Psychological Review*, 119: 345 – 372.
- Masterson, S.S. (2001). A trickle-down model of organizational justice: Relating employees' and customers' perceptions of and reactions to fairness. *Journal of Applied Psychology*, 86: 594-604.
- Mawritz, M.B., Mayer, D.M., Hoobler, J.M., Wayne, S.J. & Marinova, S.V. (2012). A trickle-down model of abusive supervision. *Personnel Psychology*, 65: 325-357.
- Mayer, D.M., Kuenzi, M., Greenbaum, R., Bardes, M, & Salvador, R. (2009). How does ethical leadership flow? Test of trickle-down model. *Organizational Behavior and Human Decision Processes*, 108: 1-13.
- McFarlin, D.B. & Sweeney, P.D. (1992). Research notes. Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35: 626-637.
- Monin, B. (2007). Holier than me? Threatening social comparison in the moral domain. *Revue Internationale De Psychologie Sociale Special Issue: Social Comparison*,

20: 53–68.

Muller, D., Judd, C.M. & Yzerbyt, V.Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89: 852-863.

Nelson, L.D., Simmons, J.P., & Simonsohn, U. (2012). Let's publish *fewer* papers. *Psychological Inquiry*, 23: 291 – 293.

O'Connor, D.A., Meade, B., Carter, O., Rossiter, S. & Hester, R. (2014). Behavioral sensitivity to reward is reduced for far objects. *Psychological Science*, 25: 271-277.

Peterson, R. S., Smith, D. B., Martorana, P.V. & Owens, P. D. (2003). The impact of chief executive officer personality on top management team dynamics: One mechanism by which leadership affects organizational performance. *Journal of Applied Psychology*, 88: 795-808.

Popper, M. (2013). Leaders perceived as distant and close. Some implications for psychological theory on leadership. *Leadership Quarterly*, 24: 1-8.

Rozin, P. & Royzman, E.B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5: 296-320.

Rucker, D.D., Preacher, K.J., Tormela, Z.L., & Petty, R.E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass*, 5: 359-371.

Ruiz, P., Ruiz, C., & Martínez, R. (2011). Improving the “leader-follower” relationship: Top manager or supervisor? The ethical leadership trickle-down effect on follower job response. *Journal of Business Ethics*, 99: 587-608.

- Rupp, D. E. (2011). An employee-centered model of organizational justice and social responsibility. *Organizational Psychology Review*, 1: 72-94.
- Saj, A., Fuhrman, O., Vuilleumier, P. & Boroditsky, L. (2014). Patients with left spatial neglect also neglect the “left side” of time. *Psychological Science*, 25: 207-214.
- Schimmack, U. (2012). The ironic effect of significant results on the credibility of multiple-study articles. *Psychological Methods*, 17: 551.
- Schminke, M., Ambrose, M.L. & Cropanzano, R.S. (2000). The effect of organizational structure on perceptions of procedural fairness. *Journal of Applied Psychology*, 85: 294-304.
- Scott, B. A., Colquitt, J. A. & Paddock, E. L. (2009). An actor-focused model of justice rule adherence and violation: The role of managerial motives and discretion. *Journal of Applied Psychology*, 94: 756-769.
- Scott, B. A., Colquitt, J. A. & Zapata, C. P. (2007). Justice as a dependent variable: Subordinate charisma as a predictor of interpersonal and informational justice perceptions. *Journal of Applied Psychology*, 92: 1597-1609.
- Sedlmeier, P., & Gigerenzer, G. (1989). Do studies of statistical power have an effect on the power of studies? *Psychological Bulletin*, 105: 309 – 316.
- Seppälä, T., Lipponen, J., Pirttilä-Backman, A.M. & Lipsanen, J. (2012). A trust-focused model of leaders’ fairness enactment. *Journal of Personnel Psychology*, 11: 20-30.
- Shamir, B. (1992). Attribution of influence and charisma to the leader: The romance of leadership revisited. *Journal of Applied Social Psychology*, 22: 386-407.
- Szilagyi, A.D. & Holland, W.E. (1980). Changes in social density: Relationships with

- functional interaction and perceptions of job characteristics, role stress, and work satisfaction. *Journal of Applied Psychology*, 65: 28-33.
- Tepper, B.J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management*, 33: 261-289.
- Thibaut, J., & Walker, L. (1975). *Procedural justice. A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Truxillo, M. D., Bauer, T. N., Campion, M. A. & Paronto, M. E. (2002). Selection fairness information and applicant reactions: A longitudinal field study. *Journal of Applied Psychology*, 87: 1020-1031.
- Williams, L.E. & Bargh, J.A. (2008). Keeping one's distance. The influence of spatial distance on affect and evaluation. *Psychological Science*, 19: 203-208.
- Wineman, J.D. (1982). Office design and evaluation: An overview. *Environment & Behavior*, 14: 271-298.
- Yamada, A.M. & Singelis, T.M. (1999). Biculturalism and self-construal. *International Journal of Intercultural Relations*, 23: 697-79.
- Zellars, K.L., Tepper, B.J. & Duffy, M.K. (2002). Abusive supervision and subordinates' organizational citizenship behavior. *Journal of Applied Psychology*, 87: 1068-1076.